



IPW #  
T

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Agnew et al. )  
Serial No.: 10/821,522 ) Examiner: Not Yet Assigned  
Filed: April 9, 2004 ) Group Art Unit: 1645  
For: Compositions and Methods for )  
Detection and Isolation of )  
Phosphorylated Molecules ) TRANSMITTAL LETTER

---

Commissioner for Patents  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith are the following documents in the above-identified application.

- Information Disclosure Statement
- Substituted PTO Form 1449
- Cited References A1-A103, B1-B9 and C1-C90
- Return Postcard (Postage prepaid)

In the event that the Patent Office determines that these documents were not timely filed within the three-month deadline, the Commissioner is hereby authorized to charge the **Deposit Account 13-3900** for any fees due in connection with the filing of this document according to § 1.17(p).

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS PAPER AND THE DOCUMENTS REFERRED AS BEING ATTACHED OR ENCLOSED HEREWITH ARE BEING DEPOSITED WITH THE UNITED STATES POSTAL OFFICE ON June 29, 2004 AS FIRST CLASS MAIL IN TWO BOXES ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX ALEXANDRIA, VA 22313-1450.  
By Michael A. Sennett, Michael A. Sennett

Respectfully submitted,

Koren J. Anderson

Koren J. Anderson, Ph.D.  
Reg. No. 51,061

Date: June 29, 2004  
Molecular Probes, Inc.  
29851 Willow Creek Rd.  
Eugene, Oregon, 97402  
Phone: (541) 335-0203  
Facsimile: (541) 335-0188

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# FEE TRANSMITTAL

## for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180.00)

## Complete if Known

Application Number	10/821,522
Filing Date	April 9, 2004
First Named Inventor	Brian Agnew
Examiner Name	
Art Unit	
Attorney Docket No.	

## METHOD OF PAYMENT (check all that apply)

Check  Credit card  Money Order  Other  None

 Deposit Account:

Deposit Account Number	13-3900
Deposit Account Name	Molecular Probes, Inc.

The Director is authorized to: (check all that apply)

- Charge fee(s) indicated below  Credit any overpayments  
 Charge any additional fee(s) or any underpayment of fee(s)  
 Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)		(\$ 0.00)	

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Extra Claims	Fee from below	Fee Paid
Independent Claims	-20** =	X	=
Multiple Dependent	- 3** =	X	=

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)		(\$ 0.00)

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	180.00
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180.00)

## SUBMITTED BY

(Complete if applicable)

Name (Print/Type)	Koren J. Anderson	Registration No. (Attorney/Agent)	51,061	Telephone	541-335-0203
Signature	<i>Koren J. Anderson</i>			Date	6/29/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Agnew *et al.*)  
Serial No.: 10/821,522 ) Examiner: Not Yet Known  
Filed: April 9, 2004 ) Group Art Unit: 1645  
For: **Compositions and Methods for**) **INFORMATION DISCLOSURE**  
**Detection and Isolation of**)  
**Phosphorylated Molecules**) **STATEMENT**

Commissioner for Patents  
U.S. Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR 1.97(b), the Information Disclosure Statement being transmitted herewith is being filed before the mailing date of the first Office Action on the merits and within three months from filing of the above-identified application.

The enclosed references may be material to the examination of the above-identified application. Applicants, respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. The Examiner is requested to initial and return the enclosed substituted PTO-1449 form in accordance with MPEP §609.

This Information Disclosure Statement pursuant to 37 CFR 1.97 is not to be construed as a representation that: (1) a search has been made or (2) the above information constitutes prior art to the subject invention. Accordingly, it is requested that the Examiner consider the enclosed references.

07/07/2004 EFLORES 00000097 133900 10821522

01 FC:1806 180.00 DA

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS PAPER AND THE DOCUMENTS REFERRED TO AS BEING ATTACHED OR ENCLOSED HEREWITH ARE  
BEING DEPOSITED WITH THE UNITED STATES POSTAL OFFICE ON June 29, 2004 AS FIRST CLASS MAIL IN TWO  
BOXES ADDRESSED TO: COMMISSIONER FOR PATENTS, P.O. BOX 1450 ALEXANDRIA, VA 22313-1450.  
By Michael A. Seydel, Michael A. Seydel

Agnew, et al.  
10/821,522

Respectfully submitted,

Date: June 29, 2004

Molecular Probes, Inc.  
29851 Willow Creek Road  
Eugene, Oregon, 97402  
Phone: (541) 335-0203  
Facsimile: (541) 335-0188

Koren J. Anderson  
Koren J. Anderson, Ph.D.  
Reg. No. 51,061

Substitute for form 1449/PTO



**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

Docket: Unassigned

Ser: 10/821,522

Applicant: Agnew, et al.

Filed: 9 April 2004

Group: Unknown

**U.S. PATENT DOCUMENTS**

Init.*	Cite No.	Number	Date	Name	Class	Sub	Filed
A1		10/703,816	11-07-03	Agnew et al.			
A2		2004/0038306A1	05-02-03	Agnew et al.			
A3		60/377,733	05-03-02	Agnew et al.			
A4		60/393,059	06-28-02	Agnew et al.			
A5		60/407,255	08-30-02	Agnew et al.			
A6		60/440,252	01-14-03	Agnew et al.			
A7		5,512,486	04-30-96	Giese et al.			
A8		4,603,209	07-29-86	Tsien et al.			
A9		5,049,673	09-17-91	Tsien et al.			
A10		4,849,362	07-18-89	DeMarinis et al.			
A11		5,773,227	06-30-98	Kuhn et al.			
A12		5,453,517	09-26-95	Kuhn et al.			
A13		5,516,911	05-14-96	London et al.			
A14		5,501,980	03-26-96	Katerinopoulos et al.			
A15		6,162,931	12-19-00	Gee et al.			
A16		5,459,276	10-17-95	Kuhn et al.			
A17		6,316,267	11-13-01	Bhalgat et al			
A18		2002/0077487A1	06-20-02	Leung et al.			
A19		2002/0064794A1	05-30-02	Leung et al.			
A20		6,403,807	06-11-02	Singh et al.			
A21		6,348,599	02-19-02	Cummins et al.			
A22		09/557,275	04-24-00	Haugland et al.			
A23		5,486,616	01-23-96	Waggoner et al.			
A24		5,268,486	12-07-93	Waggoner et al.			
A25		5,569,587	10-29-96	Waggoner			
A26		5,569,766	10-29-96	Waggoner et al.			
A27		5,627,027	05-06-97	Waggoner			
A28		6,048,982	04-11-00	Waggoner			
A29		4,774,339	09-27-88	Haugland et al.			
A30		5,187,288	02-16-93	Kang et al.			
A31		5,248,782	09-28-93	Haugland et al.			
A32		5,274,113	12-28-93	Kang et al.			
A33		5,433,896	07-18-95	Kang, et al.			
A34		6,130,101	10-10-00	Mao et al.			
A35		6,229,055	05-08-01	Klaubert et al.			
A36		6,339,392	06-04-02	Haugland et al.			
A37		5,451,343	09-19-95	Neckers et al.			
A38		6,221,606	04-24-01	Benson et al.			
A39		6,358,684	03-19-02	Lee			
A40		6,008,379	12-28-99	Benson et al.			
A41		6,111,116	08-29-00	Benson et al.			
A42		6,184,379	02-06-01	Josel et al.			
A43		6,017,712	01-25-00	Lee et al.			
A44		6,080,852	06-27-00	Lee et al.			
A45		5,847,162	12-08-98	Lee et al.			

EXAMINER:

DATE:

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT</b>  <b>BY APPLICANT</b>		Docket: Unassigned	Ser: 10/821,522
		Applicant: Agnew, et al.	
		Filed: 9 April 2004	Group: Unknown

**U.S. PATENT DOCUMENTS**

A46	2002/0059684A1	05-23-02	Diwu et al.			
A47	4,810,636	03-07-89	Corey			
A48	5,696,157	12-09-97	Wang et al.			
A49	5,830,912	11-03-98	Gee et al.			
A50	4,812,409	03-14-89	Babb et al.			
A51	5,242,805	09-07-93	Naleway et al.			
A52	5,227,487	07-13-93	Haugland et al			
A53	5,442,045	08-15-95	Haugland et al.			
A54	5,798,276	08-25-98	Haugland et al.			
A55	5,846,737	12-08-98	Kang			
A56	4,945,171	07-31-90	Haugland et al.			
A57	4,384,042	05-17-83	Miike et al.			
A58	5,196,306	03-23-93	Bobrow et al.			
A59	5,583,001	12-10-96	Bobrow et al			
A60	5,731,158	03-24-98	Bobrow et al.			
A61	5,316,906	05-31-94	Haugland et al.			
A62	5,443,986	08-22-95	Haugland et al.			
A63	5,208,148	05-04-93	Haugland et al.			
A64	5,362,628	11-08-94	Haugland et al.			
A65	5,576,424	11-19-96	Mao et al.			
A66	5,773,236	06-30-98	Diwu et al.			
A67	4,520,110	05-28-85	Stryer et al.			
A68	4,859,582	08-22-89	Stryer et al.			
A69	5,055,556	10-08-91	Stryer et al.			
A70	4,542,104	09-17-85	Stryer et al.			
A71	5,863,727	01-26-99	Lee et al.			
A72	6,372,445	04-16-02	Davis et al.			
A73	5,656,554	08-12-97	Desai et al.			
A74	5,714,327	02-03-98	Houthoff et al.			
A75	5,616,502	04-01-97	Haugland et al.			
A76	6,579,718	06-17-03	Yue et al.			
A77	6,329,205 B1	12-11-01	Diwu et al.			
A78	10/005,050	12-03-01	Haugland et al.			
A79	2002/0137068A1	09-26-02	Haugland et al.			
A80	10/661,451	09-12-03	Diwu et al.			
A81	2002/0076727	06-20-02	Cardone et al.			
A82	2002/0106785	08-08-02	Jan et al.			
A83	2002/0055186	05-09-02	Barry et al.			
A84	6,403,368	06-11-02	Jan et al.			
A85	6,475,809	11-05-02	Wagner et al.			
A86	6,365,418	04-02-02	Wagner et al.			
A87	6,409,921	06-25-02	Muller et al.			
A88	5,595,915	01-21-97	Geysen			
A89	6,461,807	10-08-02	Friend et al.			
A90	6,399,299	06-04-02	Bobrow et al.			
A91	6,372,813	04-16-02	Johnson et al.			
A92	6,391,937	05-21-02	Beuhler et al.			

EXAMINER: \_\_\_\_\_ DATE: \_\_\_\_\_

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO					Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>					Applicant: Agnew, et al.	
<b>BY APPLICANT</b>					Filed: 9 April 2004	Group: Unknown

**U.S. PATENT DOCUMENTS**

A93	6,387,631	05-14-02	Arnold et al.				
A94	6,413,722	07-02-02	Arnold et al.				
A95	6,207,397	03-27-01	Lynch et al.				
A96	5,981,180	11-09-99	Chandler et al.				
A97	6,268,222 B1	07-31-01	Chandler et al.				
A98	6,413,420 B1	07-02-02	Foy et al.				
A99	08/868,598	06-04-97	Sterman et al.				
A100	2002/0117451	08-29-02	Foy et al.				
A101	4,339,337	07-13-82	Tricot et al.				
A102	5,834,121	11-10-98	Sucholeiki et al.				
A103	5,538,897	07-23-96	Yates, III et al				

**FOREIGN PATENT DOCUMENTS**

Init.*	Cite No.	Number	Date	Country	Class	Sub	
	B1	WO 99/39210	08-05-99	WIPO			
	B2	WO 00/63701	10-26-00	WIPO			
	B3	WO 02/25288	06-20-02	WIPO			
	B4	WO 01/18545	03-15-01	WIPO			
	B5	WO 00/04380	01-27-00	WIPO			
	B6	WO 00/75167 A2	12-14-00	WIPO			
	B7	WO 01/96869 A1	12-20-01	WIPO			
	B8	EP 1 156 329 A2	11-21-01	EPO			
	B9	EP 1 215 501 A1	06-19-02	EPO			

**NON PATENT LITERATURE DOCUMENTS**

Init.*	Cite No.	Name of Author, Title of the Article, Title of the Item, Date, Volume-Issue Number, Page
	C1	Protein Phosphorylation: A Practical Approach. Edited by D. G. Hardie. The Practical Approach Series, Series Editors: D. Rickwood and B.D. Hames, IRL Press at Oxford University Press, Oxford, England, 1993, ISBN 0-19-963305.
	C2	Hunter, T., <i>Signaling--2000 and beyond</i> . Cell, 2000. 100(1): p. 113-27.
	C3	Wilkins, M.R., et al., <i>Progress with proteome projects: why all proteins expressed by a genome should be identified and how to do it</i> . Biotechnol Genet Eng Rev, 1996. 13: p. 19-50.
	C4	Nishizuka, Y., <i>Studies and perspectives of protein kinase C</i> . Science, 1986. 233(4761): p. 305-12
	C5	Guy, G.R., R. Philip, and Y.H. Tan, <i>Analysis of cellular phosphoproteins by two-dimensional gel electrophoresis: applications for cell signaling in normal and cancer cells</i> . Electrophoresis, 1994. 15(3-4): p. 417-40.
	C6	Yan, J.X., et al., <i>Protein phosphorylation: technologies for the identification of phosphoamino acids</i> . J Chromatogr A, 1998. 808(1-2): p. 23-41.
	C7	Soskic, V., et al., <i>Functional proteomics analysis of signal transduction pathways of the platelet-derived growth factor beta receptor</i> . Biochemistry, 1999. 38(6): p. 1757-64.

EXAMINER: \_\_\_\_\_ DATE: \_\_\_\_\_

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

**NON PATENT LITERATURE DOCUMENTS**

C8	Watty, A., et al., <i>The in vitro and in vivo phosphotyrosine map of activated MuSK</i> . Proc Natl Acad Sci U S A, 2000. <b>97</b> (9): p. 4585-90.
C9	McLachlin, D.T. and B.T. Chait, <i>Analysis of phosphorylated proteins and peptides by mass spectrometry</i> . Curr Opin Chem Biol, 2001. <b>5</b> (5): p. 591-602.
C10	Green, M.R., J.V. Pastewka, and A.C. Peacock, <i>Differential staining of phosphoproteins on polyacrylamide gels with a cationic carbocyanine dye</i> . Anal Biochem, 1973. <b>56</b> (1): p. 43-51.
C11	Hegenauer, J., L. Ripley, and G. Nace, <i>Staining acidic phosphoproteins (phosvitin) in electrophoretic gels</i> . Anal Biochem, 1977. <b>78</b> (1): p. 308-11.
C12	Debruyne, I., <i>Staining of alkali-labile phosphoproteins and alkaline phosphatases on polyacrylamide gels</i> . Anal Biochem, 1983. <b>133</b> (1): p. 110-5.
C13	Kamiya, M. and T. Okuyama, <i>Staining acidic phosphoprotein in polyacrylamide gels with acridine orange</i> . Seikagaku, 1973. <b>45</b> (7): p. 327-35.
C14	Cutting, J.A. and T.F. Roth, <i>Staining of phospho-proteins on acrylamide gel electropherograms</i> . Anal Biochem, 1973. <b>54</b> (2): p. 386-94.
C15	Wang, P. and R.W. Giese, <i>Phosphate-specific fluorescence labeling of pepsin by BO-IMI</i> . Anal Biochem, 1995. <b>230</b> (2): p. 329-32.
C16	Goshe, M.B., et al., <i>Phosphoprotein isotope-coded affinity tag approach for isolating and quantitating phosphopeptides in proteome-wide analyses</i> . Anal Chem, 2001. <b>73</b> (11): p. 2578-86.
C17	Oda, Y., T. Nagasu, and B.T. Chait, <i>Enrichment analysis of phosphorylated proteins as a tool for probing the phosphoproteome</i> . Nat Biotechnol, 2001. <b>19</b> (4): p. 379-82.
C18	Zhou, H., J.D. Watts, and R. Aebersold, <i>A systematic approach to the analysis of protein phosphorylation</i> . Nat Biotechnol, 2001. <b>19</b> (4): p. 375-8.
C19	Adamczyk, M., J.C. Gebler, and J. Wu, <i>Selective analysis of phosphopeptides within a protein mixture by chemical modification, reversible biotinylation and mass spectrometry</i> . Rapid Commun Mass Spectrom, 2001. <b>15</b> (16): p. 1481-8.
C20	Resing, K.A. and N.G. Ahn, <i>Protein phosphorylation analysis by electrospray ionization-mass spectrometry</i> . Methods Enzymol, 1997. <b>283</b> : p. 29-44.
C21	Aebersold, R. and D.R. Goodlett, <i>Mass spectrometry in proteomics</i> . Chem Rev, 2001. <b>101</b> (2): p. 269-95.
C22	Affolter, M., et al., <i>Evaluation of two-dimensional phosphopeptide maps by electrospray ionization mass spectrometry of recovered peptides</i> . Anal Biochem, 1994. <b>223</b> (1): p. 74-81.

EXAMINER: \_\_\_\_\_ DATE: \_\_\_\_\_

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
 draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

**NON PATENT LITERATURE DOCUMENTS**

C23	Liao, P.C., et al., <i>An approach to locate phosphorylation sites in a phosphoprotein: mass mapping by combining specific enzymatic degradation with matrix-assisted laser desorption/ionization mass spectrometry</i> . Anal Biochem, 1994. <b>219</b> (1): p. 9-20.
C24	Oda, Y., et al., <i>Accurate quantitation of protein expression and site-specific phosphorylation</i> . Proc Natl Acad Sci U S A, 1999. <b>96</b> (12): p. 6591-6.
C25	Posewitz, M.C. and P. Tempst, <i>Immobilized gallium(III) affinity chromatography of phosphopeptides</i> . Anal Chem, 1999. <b>71</b> (14): p. 2883-92.
C26	Neville, D.C., et al., <i>Evidence for phosphorylation of serine 753 in CFTR using a novel metal-ion affinity resin and matrix-assisted laser desorption mass spectrometry</i> . Protein Sci, 1997. <b>6</b> (11): p. 2436-45.
C27	Xhou, W., et al., <i>Detection and sequencing of phosphopeptides affinity bound to immobilized metal ion beads by matrix-assisted laser desorption/ionization mass spectrometry</i> . J Am Soc Mass Spectrom, 2000. <b>11</b> (4): p. 273-82.
C28	Haugland, R., HANDBOOK OF FLUORESCENT PROBES AND RESEARCH CHEMICALS (9 <sup>th</sup> edition, CD-ROM, September 2002).
C29	Furniss, B.S. et al. (eds.), VOGEL'S ENCYCLOPEDIA OF PRACTICAL ORGANIC CHEMISTRY 5 <sup>TH</sup> ED., Longman Scientific and Technical Ltd., Essex, 1991, pp. 809-816
C30	Heller, A, <i>Electrical Wiring of Redox Enzymes</i> . Acc. Chem. Res, 1990. <b>23</b> : 128-134.
C31	Selvin, P.R., <i>Fluorescence resonance energy transfer</i> . Methods Enzymol, 1995. <b>246</b> : p. 300-34.
C32	dos Remedios, C.G. and P.D. Moens, <i>Fluorescence resonance energy transfer spectroscopy is a reliable "ruler" for measuring structural changes in proteins. Dispelling the problem of the unknown orientation factor</i> . J Struct Biol, 1995. <b>115</b> (2): p. 175-85.
C33	Wu, P. and L. Brand, <i>Resonance energy transfer: methods and applications</i> . Anal Biochem, 1994. <b>218</b> (1): p. 1-13
C34	Matayoshi, E.D., et al., <i>Novel fluorogenic substrates for assaying retroviral proteases by resonance energy transfer</i> . Science, 1990. <b>247</b> (4945): p. 954-8.
C35	Morrison, L.E., <i>Detection of Energy Transfer and Fluorescence Quenching</i> , in <u>Nonisotopic DNA Probe Techniques</u> , L. Kricka, ed. Academic Press, San Diego, (1992): pp. 311-352
C36	Tyagi, S., D.P. Bratu, and F.R. Kramer, <i>Multicolor molecular beacons for allele discrimination</i> . Nat Biotechnol, 1998. <b>16</b> (1): p. 49-53.
C37	Tyagi, S. and F.R. Kramer, <i>Molecular beacons: probes that fluoresce upon hybridization</i> . Nat Biotechnol, 1996. <b>14</b> (3): p. 303-8.
C38	Patton, W.F., <i>Detection technologies in proteome analysis</i> . J Chromatogr B Analyt Technol Biomed Life Sci, 2002. <b>771</b> (1-2): p. 3-31.

EXAMINER: \_\_\_\_\_ DATE: \_\_\_\_\_

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

**NON PATENT LITERATURE DOCUMENTS**

C39	Patton, W.F., <i>A thousand points of light: the application of fluorescence detection technologies to two-dimensional gel electrophoresis and proteomics</i> . Electrophoresis, 2000. <b>21</b> (6): p. 1123-44.
C40	Jung, S.M. and M. Moroi, <i>Crosslinking of platelet glycoprotein Ib by N-succinimidyl(4-azidophenyl)dithio)propionate and 3,3'-dithiobis(sulfosuccinimidyl propionate)</i> . Biochim Biophys Acta, 1983. <b>761</b> (2): p. 152-62.
C41	Joshi, S. and R. Burrows, <i>ATP synthase complex from bovine heart mitochondria. Subunit arrangement as revealed by nearest neighbor analysis and susceptibility to trypsin</i> . J Biol Chem, 1990. <b>265</b> (24): p. 14518-25.
C42	Zarling, D.A., A. Watson, and F.H. Bach, <i>Mapping of lymphocyte surface polypeptide antigens by chemical cross-linking with BSOCOES</i> . J Immunol, 1980. <b>124</b> (2): p. 913-20.
C43	Bouizar, Z., et al., <i>Purification and characterization of calcitonin receptors in rat kidney membranes by covalent cross-linking techniques</i> . Eur J Biochem, 1986. <b>155</b> (1): p. 141-7.
C44	Park, L.S., et al., <i>Characterization of the cell surface receptor for a multi-lineage colony-stimulating factor (CSF-2 alpha)</i> . J Biol Chem, 1986. <b>261</b> (1): p. 205-10.
C45	Browning, J. and A. Ribolini, <i>Studies on the differing effects of tumor necrosis factor and lymphotoxin on the growth of several human tumor lines</i> . J Immunol, 1989. <b>143</b> (6): p. 1859-67.
C46	Kaufmann, H., J.E. Bailey, and M. Fusseenegger, <i>Use of antibodies for detection of phosphorylated proteins separated by two-dimensional gel electrophoresis</i> . Proteomics, 2001. <b>1</b> (2): p. 194-9.
C47	Yan, J.X., et al., <i>Protein phosphorylation: technologies for the identification of phosphoamino acids</i> . J Chromatogr A, 1998. <b>808</b> (1-2): p. 23-41.
C48	Malone, J.P., et al., <i>Practical aspects of fluorescent staining for proteomic applications</i> . Electrophoresis, 2001. <b>22</b> (5): p. 919-32.
C49	Steinberg, T.H., et al., <i>Rapid and simple single nanogram detection of glycoproteins in polyacrylamide gels and on electroblots</i> . Proteomics, 2001. <b>1</b> (7): p. 841-55.
C50	Shevchenko, A., et al., <i>Mass spectrometric sequencing of proteins silver-stained polyacrylamide gels</i> . Anal Chem, 1996. <b>68</b> (5): p. 850-8.
C51	Jensen, O.N., M.R. Larsen, and P. Roepstorff, <i>Mass spectrometric identification and microcharacterization of proteins from electrophoretic gels: strategies and applications</i> . Proteins, 1998. <b>Suppl 2</b> : p. 74-89.
C52	Rando, O.J., et al., <i>Phosphatidylinositol-dependent actin filament binding by the SWI/SNF-like BAF chromatin remodeling complex</i> . Proc Natl Acad Sci U S A, 2002. <b>99</b> (5): p. 2824-9.
C53	Ojala, P.J., V. Paavilainen, and P. Lappalainen, <i>Identification of yeast cofilin residues specific for actin monomer and PIP2 binding</i> . Biochemistry, 2001. <b>40</b> (51): p. 15562-9.

EXAMINER:

DATE:

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
 draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

**NON PATENT LITERATURE DOCUMENTS**

C54	Gromov, P.S. and J.E. Celis, <i>Several small GTP-binding proteins are strongly down-regulated in simian virus 40 (SV40) transformed human keratinocytes and may be required for the maintenance of the normal phenotype</i> . Electrophoresis, 1994. <b>15</b> (3-4): p. 474-81.
C55	Perrin, F., <i>Polarisation de la Lumière de Fluorescence. vie Moyenne des Molécules dans L'état Excité</i> . J. Phys. Rad, 1926. <b>1</b> : p. 390-401.
C56	Ideker, T., et al., <i>Integrated genomic and proteomic analyses of a systematically perturbed metabolic network</i> . Science, 2001. <b>292</b> (5518): p. 929-34.
C57	Gygi, S.P., B. Rist, and R. Aebersold, <i>Measuring gene expression by quantitative proteome analysis</i> . Curr Opin Biotechnol, 2000. <b>11</b> (4): p. 396-401.
C58	Goodlett, D.R., et al., <i>Protein identification with a single accurate mass of a cysteine-containing peptide and constrained database searching</i> . Anal Chem, 2000. <b>72</b> (6): p. 1112-8.
C59	Goodlett, D.R., R. Aebersold, and J.D. Watts, <i>Quantitative in vitro kinase reaction as a guide for phosphoprotein analysis by mass spectrometry</i> . Rapid Commun Mass Spectrom, 2000. <b>14</b> (5): p. 344-8.
C60	Vener, A.V., et al., <i>Mass spectrometric resolution of reversible protein phosphorylation in photosynthetic membranes of Arabidopsis thaliana</i> . J Biol Chem, 2001. <b>276</b> (10): p. 6959-66.
C61	Meyer, H.E., et al., <i>Strategies for nonradioactive methods in the localization of phosphorylated amino acids in proteins</i> . Faseb J, 1993. <b>7</b> (9): p. 776-82.
C62	Gooley, A.A. and K.L. Williams, <i>How to find, identify and quantitate the sugars on proteins</i> . Nature, 1997. <b>385</b> (6616): p. 557-9.
C63	Meyer, H.E., et al., <i>Quantitative determination of phosphoserine by high-performance liquid chromatography as the phenylthiocarbamyl-S-ethylcysteine. Application to picomolar amounts of peptides and proteins</i> . J Chromatogr, 1987. <b>397</b> : p. 113-21.
C64	Holmes, C.F., <i>A new method for the selective isolation of phosphoserine-containing peptides</i> . FEBS Lett, 1987. <b>215</b> (1): p. 21-4.
C65	Fadden, P. and T.A. Haystead, <i>Quantitative and selective fluorophore labeling of phosphoserine on peptides and proteins: characterization at the attomole level by capillary electrophoresis and laser-induced fluorescence</i> . Anal Biochem, 1995. <b>225</b> (1): p. 81-8.
C66	Stensballe, A., S. Andersen, and O.N. Jensen, <i>Characterization of phosphoproteins from electrophoretic gels by nanoscale Fe(III) affinity chromatography with off-line mass spectrometry analysis</i> . Proteomics, 2001. <b>1</b> (2): p. 207-22.
C67	Rando, O.J., et al., <i>Phosphatidylinositol-dependent actin filament binding by the SWI/SNF-like BAF chromatin remodeling complex</i> . Proc Natl Acad Sci U S A, 2002. <b>99</b> (5): p. 2824-9.

EXAMINER:	DATE:
-----------	-------

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

**NON PATENT LITERATURE DOCUMENTS**

C68	Ojala, P.J., V. Paavilainen, and P. Lappalainen, <i>Identification of yeast cofilin residues specific for actin monomer and PIP2 binding</i> . Biochemistry, 2001. 40(51): p. 15562-9.
C69	Jensen, O.N. et al., <i>Sample preparation methods for mass spectrometric peptide mapping directly from 2-DE gels</i> . Meth. Mol. Biol, 1999. 112: p. 513-30.
C70	McCormack, A.L. et al., <i>Direct analysis and identification of proteins in mixtures by LC/MS/MS and database searching at the low-femtomole level</i> . Anal Chem, 1997. 69(4): p. 767-76.
C71	Eng, J. K., et al, <i>An Approach to Correlate Tandem Mass Spectral Data of Peptides with Amino Acid Sequences in a Protein Database</i> . J Am Soc Mass Spectrom, 1994. 5: p. 976-989
C72	Herbert, B., <i>Advances in protein solubilisation for two-dimensional electrophoresis</i> . Electrophoresis, 1999. 20(4-5): p. 660-3.
C73	Ausubel, F. M., et al, <i>Short Protocols in Molecular Biology</i> , (John Wiley & Sons, 1997)
C74	Dole, V.P., <i>A relation between non-esterified fatty acids in plasma and the metabolism of glucose</i> . J Clin Invest, 1956. 35(2): p. 150-4.
C75	Dole, et al., <i>Microdetermination of Long-chain Fatty Acids in Plasma and Tissues</i> . J. Biol. Chem., 1960. 235(9): 2595-2599
C76	Bligh, et al., <i>A Rapid Method of Total Lipid Extraction and Purification</i> . Canadian Journal of Biochemistry and Physiology, 1959. 37(8): 911-917.
C77	Folch et al., <i>A Simple Method for the Isolation and Purification of Total Lipides from Animal Tissues</i> . J. Biochem. 226: 497-509 (1957).
C78	Marshall, P., et al., <i>The determination of protein phosphorylation on electrophoresis gel blots by laser ablation inductively coupled plasma-mass spectrometry</i> . Analyst, 2002. 127(4): p. 459-61.
C79	Loo, R.R., et al., <i>Virtual 2-D gel electrophoresis: visualization and analysis of the E. coli proteome by mass spectrometry</i> . Anal Chem, 2001. 73(17): p. 4063-70.
C80	Figeys, D., et al., <i>Electrophoresis combined with novel mass spectrometry techniques: powerful tools for the analysis of proteins and proteomes</i> . Electrophoresis, 1998. 19(10): p. 1811-8.

EXAMINER:	DATE:
-----------	-------

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.

Substitute for form 1449/PTO			Docket: Unassigned	Ser: 10/821,522
<b>INFORMATION DISCLOSURE STATEMENT</b>			Applicant: Agnew, et al.	
<b>BY APPLICANT</b>			Filed: 9 April 2004	Group: Unknown

<b>NON PATENT LITERATURE DOCUMENTS</b>				
C81		Doughty, D.A. and L. Tomutsa, <i>Multinuclear NMR microscopy of two-phase fluid systems in porous rock</i> . Magn Reson Imaging, 1996. <b>14</b> (7-8): p. 869-73.		
C82		Muzio, M., et al., <i>FLICE, a novel FADD-homologous ICE/CED-3-like protease, is recruited to the CD95 (Fas/APO-1) death--inducing signaling complex</i> . Cell, 1996. <b>85</b> (6): p. 817-27.		
C83		Deissler, H., et al., <i>Rapid protein sequencing by tandem mass spectrometry and cDNA cloning of p20-CGGBP. A novel protein that binds to the unstable triplet repeat 5'-d(CGG)n-3' in the human FMR1 gene</i> . J Biol Chem, 1997. <b>272</b> (27): p. 16761-8.		
C84		Schreiber, S.L., <i>Immunophilin-sensitive protein phosphatase action in cell signaling pathways</i> . Cell, 1992. <b>70</b> (3): p. 365-8.		
C85		Hanash, S.M. and D. Teichroew, <i>Mining the human proteome: experience with the human lymphoid protein database</i> . Electrophoresis, 1998. <b>19</b> (11): p. 2004-9.		
C86		Tavares, A., et al., <i>Profile of phosphoprotein labelling in organotypic slice cultures of rat hippocampus</i> . Neuroreport, 2001. <b>12</b> (12): p. 2705-9.		
C87		Stancato, L.F. and E.F. Petricoin, 3rd, <i>Fingerprinting of signal transduction pathways using a combination of anti-phosphotyrosine immunoprecipitations and two-dimensional polyacrylamide gel electrophoresis</i> . Electrophoresis, 2001. <b>22</b> (10): p. 2120-4.		
C88		Fruehling, S. and R. Longnecker, <i>In vitro assays for the detection of protein tyrosine phosphorylation and protein tyrosine kinase activities</i> . Methods Mol Biol, 2001. <b>174</b> : p. 337-43.		
C89		Wilbur, D.S., et al., <i>Evaluation of biotin-dye conjugates for use in an HPLC assay to assess relative binding of biotin derivatives with avidin and streptavidin</i> . Bioconjug Chem, 2000. <b>11</b> (4): p. 584-98.		
C90		Corson, D.T. and C.F. Meares, <i>Efficient multigram synthesis of the bifunctional chelating agent (S)-1-p-isothiocyanatobenzyl-diethylenetriaminepentaacetic acid [correction of diethylenetetraminepentaacetic acid]</i> . Bioconjug Chem, 2000. <b>11</b> (2): p. 292-9.		

EXAMINER:	DATE:
-----------	-------

\*Examiner: Initial if considered, whether or not in conformance with MPEP 60;  
draw line through citation if not in conformance and not considered. Send copy.